GENERAL NOTES:

All materials and construction shall conform to the requirements of the Arizona Department of Transportation Standard Specifications for Roads and Bridge Construction.


All concrete shall be Class "S".

Reinforcing steel shall conform to ASTM Specification A615 (Grade 60).

Structural steel shall conform to ASTM Specification A36 unless noted otherwise.

Stressway:
- Class "S" concrete: $4 = 5,000 psi
- Grade 60 reinforcing steel: $6 = 20,000 psi

Materials:
- Anchor Bolts: F1554, Grade 55
- Connectors: F225, Grade 4325
- Mast Arm Vangs and End Plates: A36
- Base Plates & Connecting Plates: A36

At bolts, nuts and washers shall be galvanized in accordance with the requirements of ASTM A532. All other steel shall be galvanized after fabrication in accordance with ASTM A522.

Shop drawings and calculations shall be signed by a Professional Engineer and submitted to the Engineer for review and approval prior to fabrication, in accordance with the requirements of the Standard Specifications.

All dimensions not shown on the plans are dependent on the manufacturer's design, and shall be shown on the shop drawings, Wind Loading 50 MPH Velocity.

The single beam shall be designed for site conditions which are neither elevated above the average surrounding terrain by more than 32'-0" nor supported on a bridge.

Maximum Sign Area: 80 ft² or 6 ft².

Tapered tubes shall conform to one of following ASTM A635, A625, A625, ASTM A403, ASTM A403, Grade A, ASTM Grade 65 or equivalent, and have a minimum yield of 50 ksi, 65 ksi, or 65 ksi after fabrication.

Support post and mast arms are not required to be of the same yield strength.

All high-strength bolts shall be tightened in accordance with AASHTO Specifications turn of nut method or calibrated wrench method for Structural Joints Issued by the Research Council on Riveted and Bolted Structural Joints unless noted otherwise.

Project Plans should provide an elevation view of each sign structure with location (latitute and offset), and sign panel layout and dimensions.

Horizontal members shall be pre-combined for dead load deflection by manufacturer.

A minimum of 4 ASTM F1554, Grade 55 steel anchor bolts with hooks are required, Thread upper 1/2. Gravel top 1/8" of bolts, and all nuts and washers.

Bolt hole diameters shall be equal to the bolt diameter + 1/8" unless noted otherwise.

All signs shall be centered vertically between mast arms.

Dimensions shall not be scaled from drawings.

(For pictures of bolts, nuts, and washers)

(For pictures of mast arms and vangs)

1) DRILLED SHAFT NOTES:

Drilled shaft foundation design shall be based on uniform soil conditions with the following soil parameters:
- Unit weight = 120 pcf
- K = 70 pcf

Depth or design should be revised by the Engineer for weather soils or rock embedment.

2) WELDING NOTES:

Welding of structural tubing shall conform to the requirements of the American Welding Society, Structural Welding Code, D1.1, latest edition.

All welding shall be continued unless noted otherwise. All butt welds shall be full penetration using prequalified welding procedures and shall be tested by ultrasonic testing. All butt welds shall be ground flush, full width.

Grinding striations shall be parallel to the length of member.

The tubo base plate weld shall be tested by ultrasonic testing. Any detected shallow toe cracks shall be repaired in the shop.